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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,331	03/12/2004	Stephan Levine	ASX-066	6232

7590 05/17/2006

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EXAMINER
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AKANBI, ISIAKA O

ART UNIT	PAPER NUMBER
2877	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/799,331	<b>Applicant(s)</b> LEVINE ET AL.	
	<b>Examiner</b> Isiaka O. Akanbi	<b>Art Unit</b> 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>18 July 2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement file 20 September 2004 and 18 July 2005 has been entered and reference considered by the examiner.

### ***Drawings***

The examiner approves the drawings filed 12 March 2004.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 10-11 and 13-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Weckstrom (6,791,689 B1).

As regard to claims 1 and 17, Weckstrom discloses an apparatus/method for measuring a constituent of a fluid comprising of the following:

a vessel (2) to contain the fluid;

a light source (1) configured to direct a first band of light and a second band of light along a substantially shared path through the fluid in the vessel, wherein the constituent has a greater absorption associated with the first band of light than with the second band of light and a photosensor (9/11) that senses the first band of light and the second band of light passing along the substantially shared path (fig. 3)(col. 6, line 20-25).

As to claims 2 and 3, Weckstrom discloses wherein the fluid comprising ozonated water and the constituent is ozone and wherein the vessel (2) comprising a delivery pipeline for the ozonated water to permit in situ measurement of the ozone. (fig. 4)(col. 7, line 5-20).

As to claims 4, 5 and 6, Weckstrom discloses wherein the spectrums are different (i.e. first band of light is associated with a yellow-red frequency and a first width, and the second band of light is associated with a blue frequency and a second width) by using/detecting wavelength region seen by detector (9) and reference detector (11) so that the signal from reference detector (11) is not sensitive (i.e. a yellow-red light-emitting diode to provide the first band of light, and a blue light-emitting diode to provide the second band of light), or is less sensitive (figs. 3 and 4)(col. 6, line 20-23).

As to claims 7 and 8, Weckstrom discloses wherein the substantially shared path is defined in part by at least one reflection site (4) to increase a length of the path through the fluid in the vessel, thereby increasing a measurement sensitivity for the constituent in the fluid and a material that defines an inner surface of the vessel that diffusely scatters the first and second bands of light at the at least one reflection site (figs. 2 and 3)(col. 4, line 56-57).

As to claims 10 and 11, Weckstrom discloses wherein the constituent has an absorption band that overlaps the first band of light and wherein the light source comprising a light-emitting diode (col. 6, line 12-43).

As to claim 13, Weckstrom discloses wherein the photosensor senses (9) the first band of light and the second band of light after the first band of light and the second band of light pass along the substantially shared path (figs. 2-4)(col. 5, line 58-col. 6, line 1-3).

As to claim 14, Weckstrom discloses wherein the photosensor (11/9) senses the first band of light and the second band of light as the first band of light and the second band of light pass along the substantially shared path (figs. 2-4).

As to claim 15, Weckstrom discloses at least one of a temperature sensor (7), for measuring a temperature of the fluid in the vessel, and a pressure sensor, for measuring a pressure of the fluid in the vessel (fig. 2)(col. 5, line 16-18).

As regard to claims 16 and 26, Weckstrom discloses an ozonated water generator and a method for producing ozonated water having a desired ozone concentration comprising of the following:

a contactor (23/30) for mixing water and ozone gas, a pipeline in fluid communication with the contactor (23/30) for delivery of ozonated water to a process tool, a light source (1) configured to direct a first band of light and a second band of light along a substantially shared path though the fluid in the pipeline, wherein a constituent of the ozonated water has a greater absorption associated with the first band of light than with the second band of light and a

photosensor (9) that senses the first band of light and the second band of light after they pass along the substantially shared path (figs. 4 and 5)(9/26/27)(col. 6, line 12-col. 8 line 1-7).

As to claim 18, Weckstrom discloses wherein modifying comprising correcting the measured attribute for an intensity loss of the sensed first band of light associated with at least one factor other than absorption by the constituent (col. 7, line 44- col. 8, line 1-7).

As to claim 19, Weckstrom discloses wherein the at least one factor comprising at least a reflectivity of a reflection site of the substantially shared path by using the detectors (figs. 2-7)(9 and 11).

As to claim 20, Weckstrom discloses providing the substantially shared path in a vessel (2)(figs. 2-7).

As to claim 21, Weckstrom discloses wherein the substantially shared path is defined in part by at least one reflection site (4) to increase a length of the substantially shared path in the vessel.

As to claim 22, Weckstrom discloses wherein the fluid is ozonated water, and further comprising causing the ozonated water to flow through the vessel (2) from an ozonated water generator (23/30) to a process tool (9/26/27) to permit in situ measurement of the ozone concentration (figs. 4-5).

As to claim 23, Weckstrom discloses alternately directing the first band of light and the second band of light along the substantially shared path, wherein sensing comprising alternately sensing (9) the first band of light and the second band of light (11)(figs. 3-4).

As to claim 24, Weckstrom discloses wherein alternately directing further comprises alternately directing no light along the substantially shared path (figs. 2-4)(col. 5, line 58-col. 6, line 1-3).

As to claim 25, Weckstrom discloses wherein further comprising sensing at least one of the first band of light (9) and the second band of light (11) along at most a portion of the substantially shared path, and responsively maintaining an emitted intensity of at least one of the first band of light and the second band of light (figs. 2-4)(col. 5, line 58-col. 6, line 1-27).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2877

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weckstrom (6,791,689 B1) as applied to claim 1, in view of the examiner Official Notice.

As to claim 9, the reference of Weckstrom discloses the claimed invention as applied to claim 7 except for is silent with regard to coating on an exterior surface of the vessel. The examiner wishes to take Official Notice of the fact that the coating an exterior/interior surface would have been well known. It would have been obvious to one having ordinary skill in the art at the time of invention to provide a coating on an exterior surface of the vessel for the purpose of accurately reflecting the total or partial reflection of a source beam.

As to claim 12, the reference of Weckstrom discloses the claimed invention as applied to claim 1 except for is silent with regard to the type of materials use for the vessel as being selected from group (i.e. quartz and a polymer). The examiner wishes to take Official Notice of the fact that the use of a material selected from the group of (i.e. quartz and a polymer) for a vessel would have been well known. It would have been obvious to one having ordinary skill in the art at the time of invention to provide a vessel comprising a material that is selected from the group of (i.e. quartz and a polymer) for the purpose of transparent or translucent for receiving flowing fluids/gas.

#### **Additional Prior Art**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references listed in the attached form PTO-892 teach of other prior art \*\*\*\*\* that may anticipate or obviate the claims of the applicant's invention.

#### **Conclusion**

### Official Notice

Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice. Applicant must seasonably challenge well known statements and statements based on personal knowledge. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well-known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well-known statement in the next reply after the Office action in which the well-known statement was made. See MPEP 2144.03, paragraphs 4 and 6.

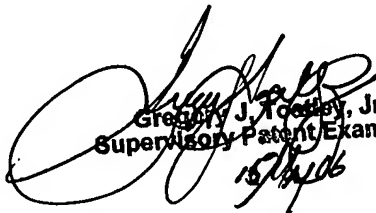
### Fax/Telephone Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isiaka Akanbi whose telephone number is (571) 272-8658. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on (571) 272-2059. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isiaka Akanbi  
May 12, 2006

  
Gregory J. Toatley, Jr.  
Supervisory Patent Examiner  
5/12/06